

# Data Mesh

The Evolution of Data Management

# About me



> 9 Years of experience  
~6 Years at Orfium



Sr. Director  
Infrastructure Platform



AWS Hero since 2020  
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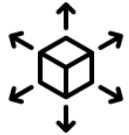
# The Data Dilemma



Massive growth of data  
sources and data



Complexity of Data Infrastructure  
and Integrations



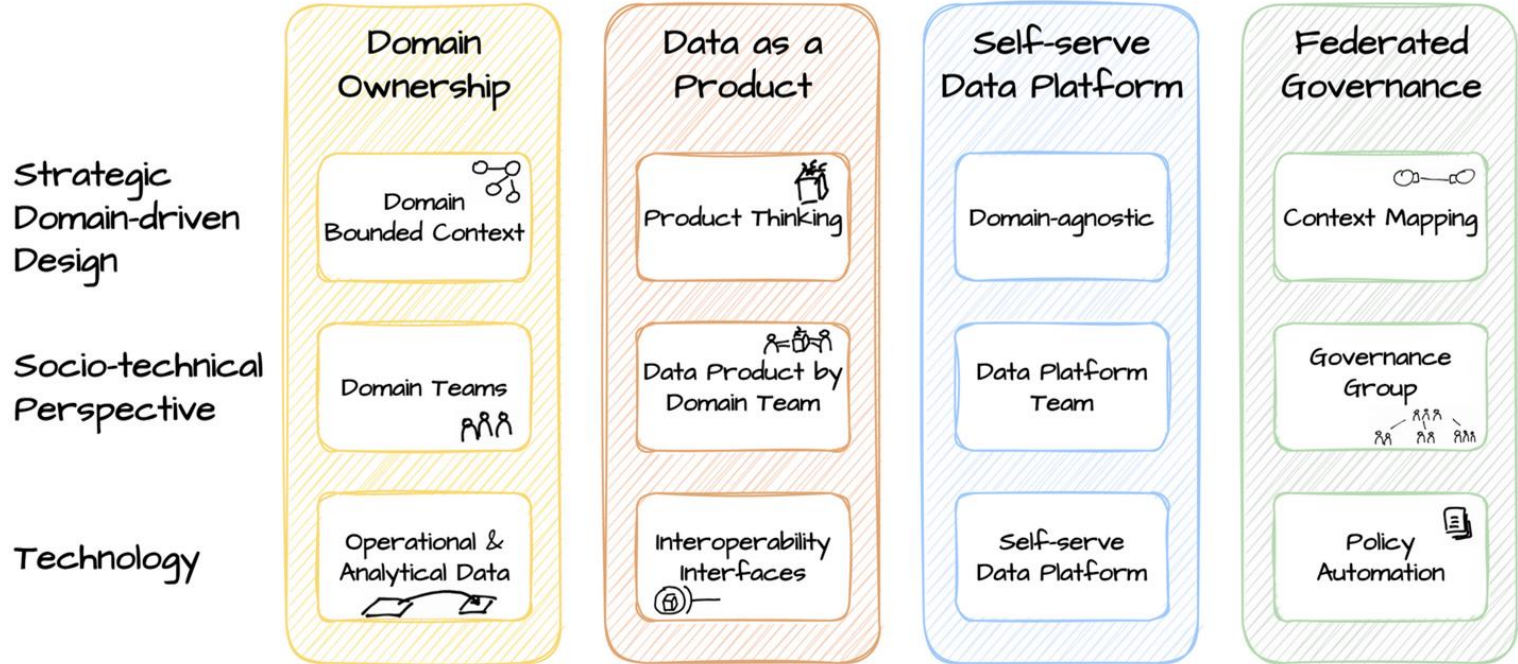
Need for agility and  
scalability

# Enter Data mesh

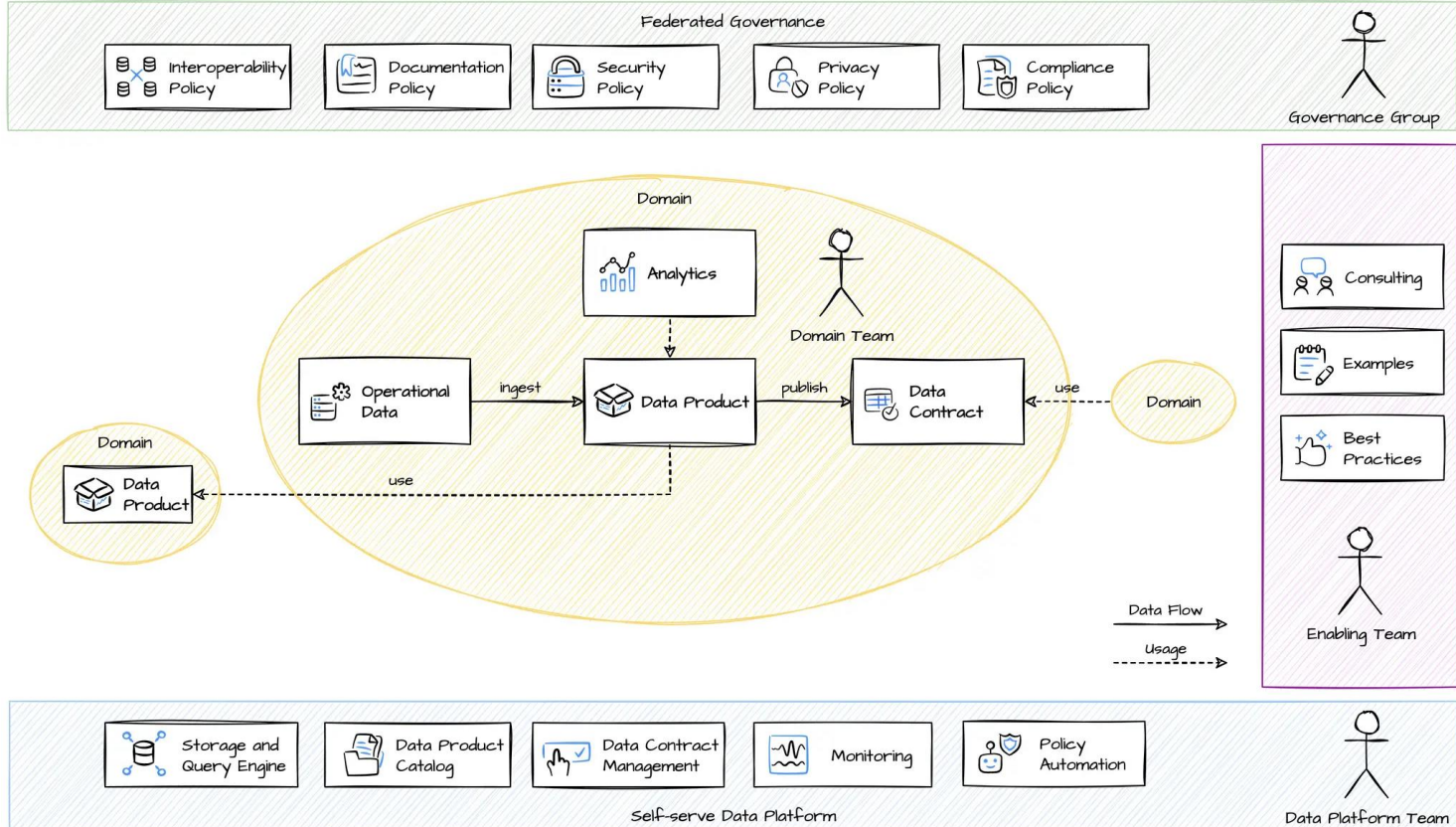
“Data Mesh revolutionizes organizations,  
Empowering teams to own and manage their  
data, Unleashing the true potential of a  
data-driven future”

Zhamak Dehghani, Data Mesh Architect

# Core Principles



# Data Mesh Architecture



# Success Story - Orfium Challenges

- X Data Silos
- X Very difficult to share datasets
- X Very difficult to create metrics across products
- X Different data definitions
- X Lack of data expertise
- X Orphaned datasets

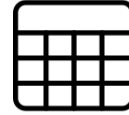
# Success Story - Current State



20 Data as Products



~160 TBs of  
compressed data



~4K tables across  
all domains



~100 active users  
daily exploring  
the data



Feeding ~200  
dashboards, internal  
and external



Time to share a new  
dataset reduced from  
days to a couple of  
minutes

# Success Story - Data Mesh in Orfium



- ✓ Data Decentralization
- ✓ Data shared to everyone across company
- ✓ Self-serve data management
- ✓ Self-serve analytics

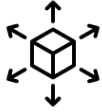


- ✓ True Data-Driven decisions
- ✓ Metrics and KPIs on every product
- ✓ Eliminating bottlenecks on data sharing requests
- ✓ Fully autonomous teams
- ✓ Data expertise on every domain

# Challenges Orfium faced

- Cultural shift towards decentralization
- Ensuring data quality and trust
- Coordinating autonomous teams
- Technical complexities and learning curve

# Value Proposition - Why Data Mesh?



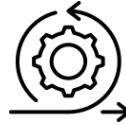
## Scalability

Growing data without growing pains



## Reliability

Reduced single points of failure



## Agility

Speedy data integration and processing



## Autonomy

Teams operate independently



## Governance

Better data quality and security

# Is Data Mesh for you?

1. Has your company modularized your software system following domain-driven principles or something similar?
2. Do you have independent domain/product teams that have their system running on production?
3. Does your model empower autonomous teams?
4. Are you prepared for a cultural shift where each data owner will have the responsibility of sharing clean data?

# Steps to Implementing Data Mesh

- Understand your Data problems and requirements
- Define your domains
- Define clear responsibilities
- Establish data product managers
- Invest in self-serve infrastructure
- Monitor, iterate, and refine

# Key Takeaways



Data Mesh addresses the complexities of modern data



It offers scalability, agility, and autonomy



Implementation requires both technical and cultural shifts



Data Mesh is a set of read-only products made of data to answer a specific or a set of questions



Offers benefits can be transformative for data-driven organizations

Thank you



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